

UMAT  
5735

4N/28E/11C  
 (START CARD) # 32007

**(1) OWNER:** Well Number New Well #2  
 Name City of Hermiston  
 Address 180 NE 2nd St.  
 City Hermiston State OR Zip 97838

**(2) TYPE OF WORK:**  
 New Well  Deepen  Recondition  Abandon

**(3) DRILL METHOD:**  
 Rotary Air  Rotary Mud  Cable  
 Other reverse circulation rotary

**(4) PROPOSED USE:**  
 Domestic  Community  Industrial  Irrigation  
 Thermal  Injection  Other

**(5) BORE HOLE CONSTRUCTION:**  
 Special Construction approval  Yes  No Depth of Completed Well 1206 ft.  
 Explosives used  Yes  No Type \_\_\_\_\_ Amount \_\_\_\_\_

HOLE			SEAL		Amount sacks or pounds	
Diameter	From	To	Material	From		To
24	0	45	cement	+1	152	146 sacks
23	45	521	cement	470	521	100 sacks
14.75	521	1206				

How was seal placed: Method  A  B  C  D  E  
 Other

Backfill placed from \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Material \_\_\_\_\_  
 Gravel placed from 152 ft. to 470 ft. Size of gravel 3/8 pea

**(6) CASING/LINER:**

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:	24	+1	45	.375	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	* 20	+2	521	.375	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	*except	at	screens		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Liner:					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Final location of shoe(s) 45

**(7) PERFORATIONS/SCREENS:**

Perforations Method \_\_\_\_\_  
 Screens Type Vshape wire Material 304SS

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
190	200	.130		20	PS	<input type="checkbox"/>	<input type="checkbox"/>
260	270	.130		20	PS	<input type="checkbox"/>	<input type="checkbox"/>

**(8) WELL TESTS: Minimum testing time is 1 hour**

Pump  Bailor  Air  Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
see attached plots			1 hr.

Temperature of Water 72°F Depth Artesian Flow Found \_\_\_\_\_  
 Was a water analysis done?  Yes By whom owner  
 Did any strata contain water not suitable for intended use?  Too little  
 Salty  Muddy  Odor  Colored  Other \_\_\_\_\_  
 Depth of strata: \_\_\_\_\_ SEI 9224

**(9) LOCATION OF WELL by legal description:**  
 County Umatilla Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
 Township 4N N or S. Range 28E E or W. WM. \_\_\_\_\_  
 Section 11 NE  $\frac{1}{4}$  of SW  $\frac{1}{4}$  \_\_\_\_\_  
 Tax Lot \_\_\_\_\_ Lot \_\_\_\_\_ Block \_\_\_\_\_ Subdivision \_\_\_\_\_  
 Street Address of Well (or nearest address) Newport Park,  
corner of 5th & Newport, Hermiston, OR 97838

**(10) STATIC WATER LEVEL:**  
87 ft. below land surface. Date 6/16/92  
 Artesian pressure \_\_\_\_\_ lb. per square inch. Date \_\_\_\_\_

**(11) WATER BEARING ZONES:**  
 Depth at which water was first found 1

From	To	Estimated Flow Rate	SWL
Attached log is marked 'WB'		Individual zone SWL &	
next to believed significant		flow are indeterminate	
water bearing zones.		if not otherwise noted	
		on formation log.	

**(12) WELL LOG:**  
 Ground elevation approx 445

Material	From	To	SWL
see attached log			

Date started 8/13/91 Completed 7/15/92

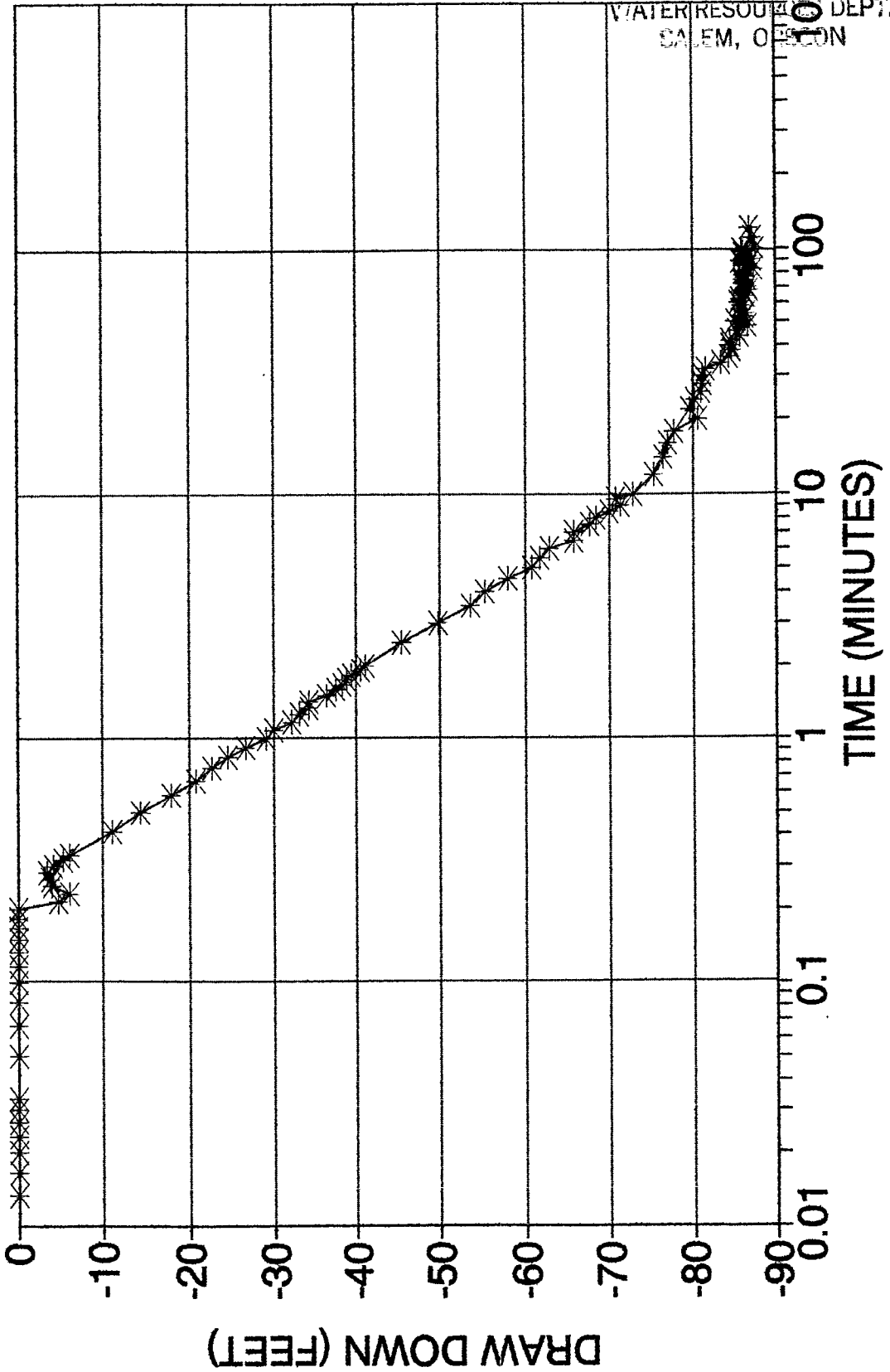
**(unbonded) Water Well Constructor Certification:**  
 I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to my best knowledge and belief.  
 Signed David D. [Signature] WWC Number 806  
 Date 8/14/92

**(bonded) Water Well Constructor Certification:**  
 I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.  
 Signed Stephen [Signature] WWC Number 649  
 Date 8/14/92

# HERMISTON WELL No. 32007

PUMP TEST 6/12/92 STEP 1:Q= 978 AVG GPM

SWL 84 FT AT START OF STEP TEST



RECEIVED

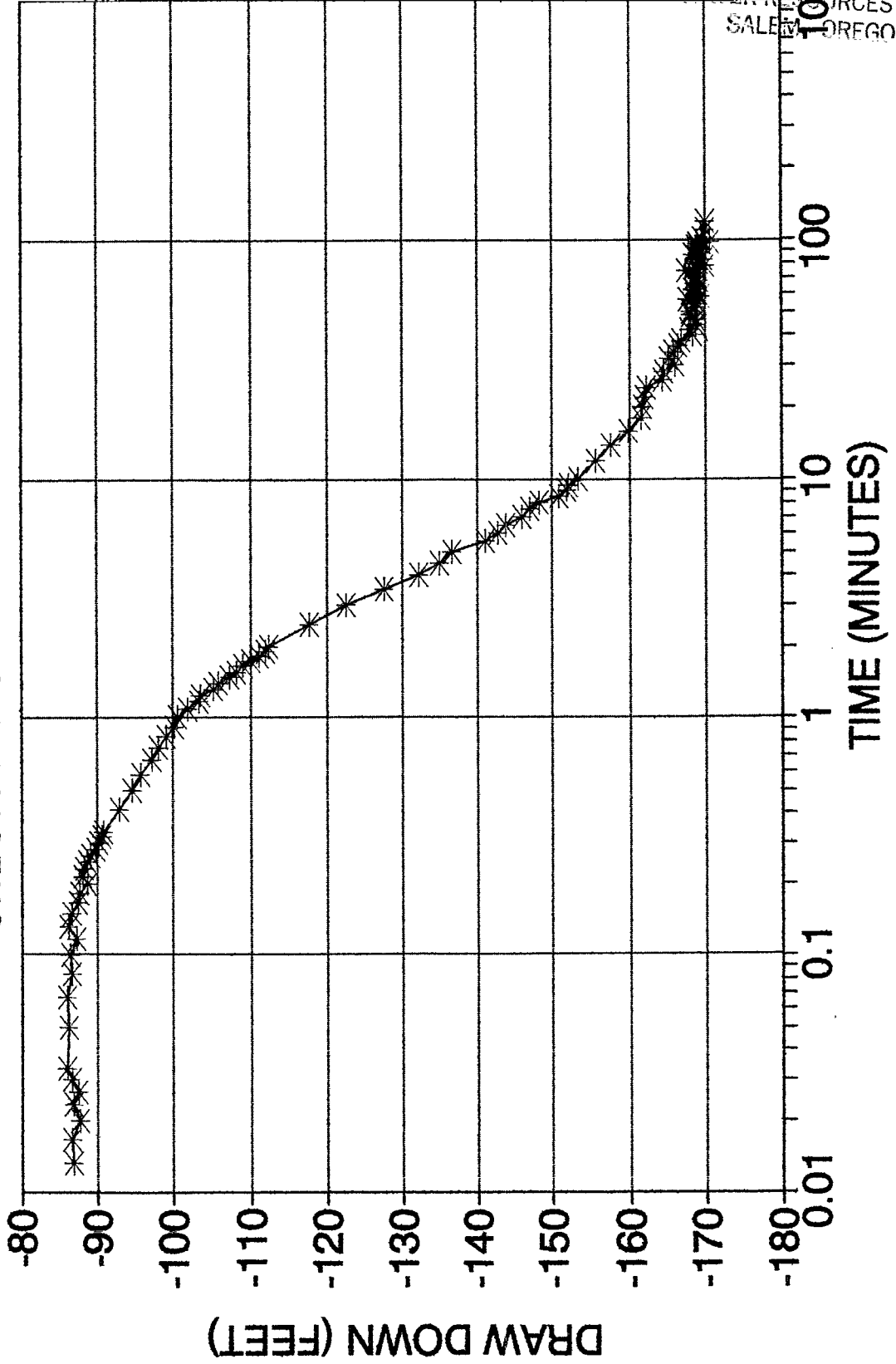
SEP 10 1992

by Schneider Drilling Co.

# HERMISTION WELL No. 32007

PUMP TEST 6/12/92 STEP 2: Q=1502 AVG GPM

SWL 84 FT AT START OF STEP TEST



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SEP 10 1992

by Schneider Drilling Co.

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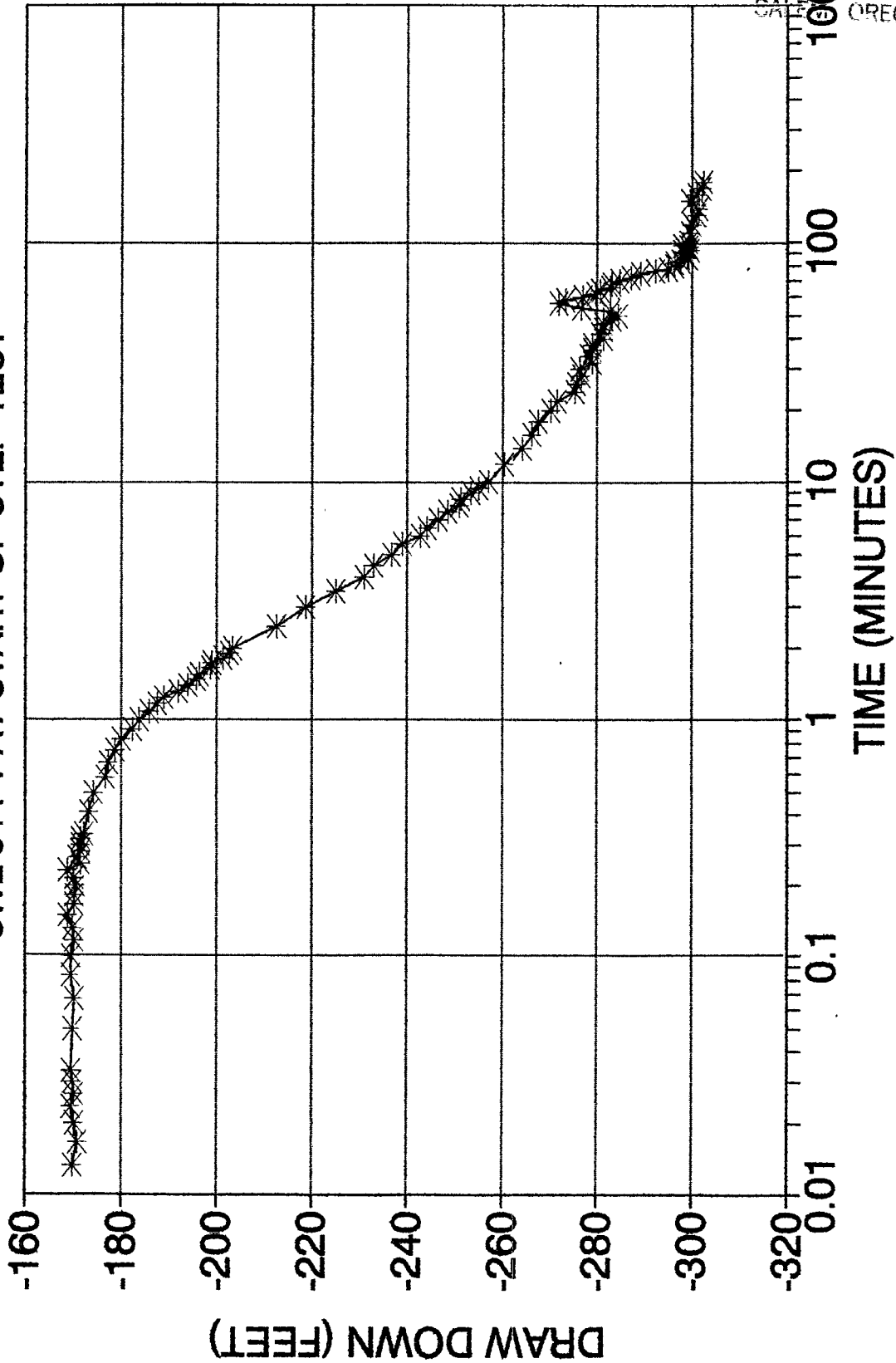
SEP 10 1992

WATER RESOURCES DEPT.  
STATE OF OREGON

# HERMISTON WELL No. 32007

PUMP TEST 6/12/92 STEP 3: Q = 1982 AVG GPM

SWL 84 FT AT START OF STEP TEST

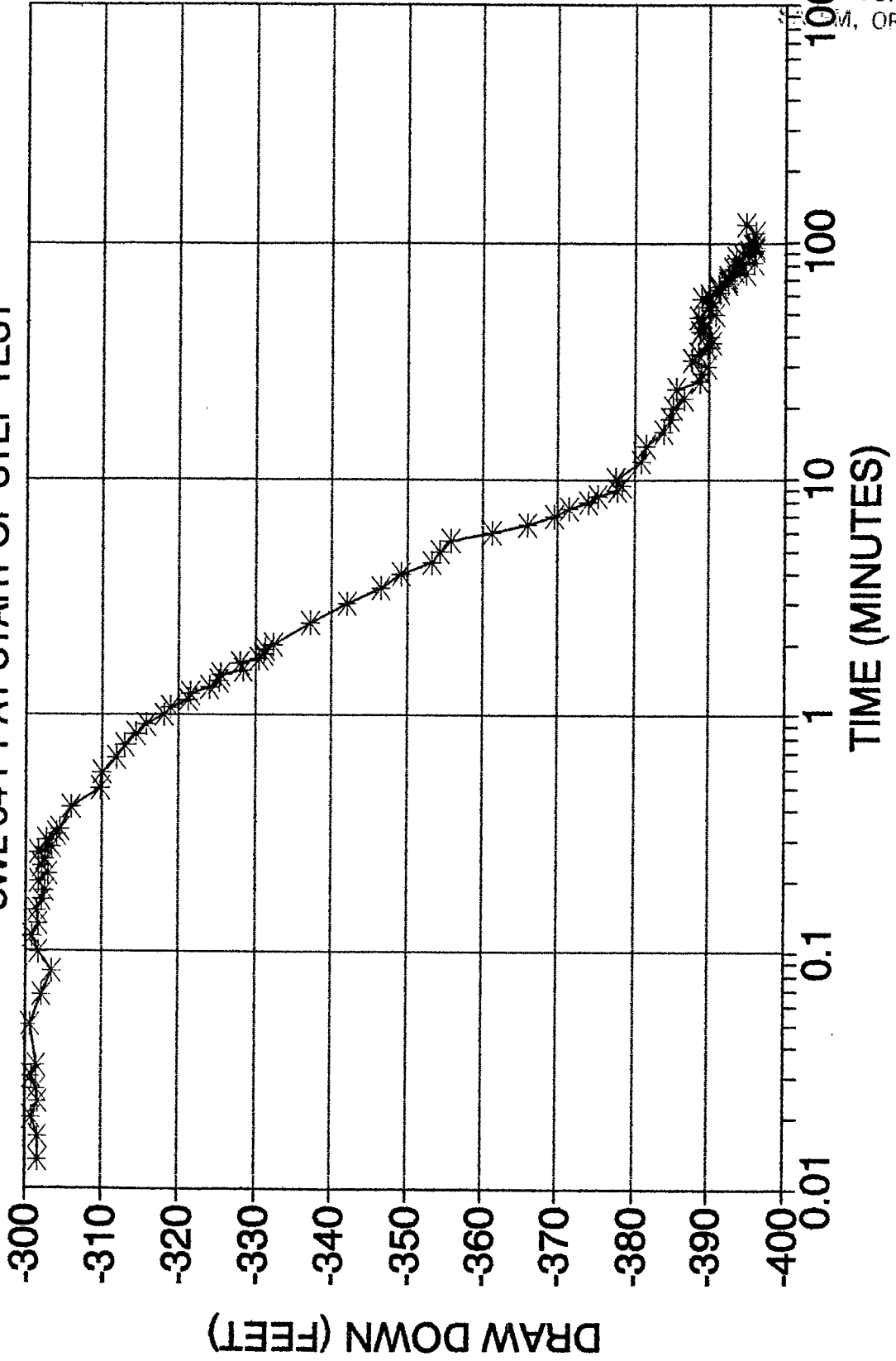


by Schneider Drilling Co.

# HERMISTON WELL NO. 32007

PUMP TEST 6/12/92 STEP 4: Q=2374 AVG GPM

SWL 84 FT AT START OF STEP TEST



by Schneider Drilling Co.

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WATER RESOURCES DEPT.  
M, OREGON

RECEIVED

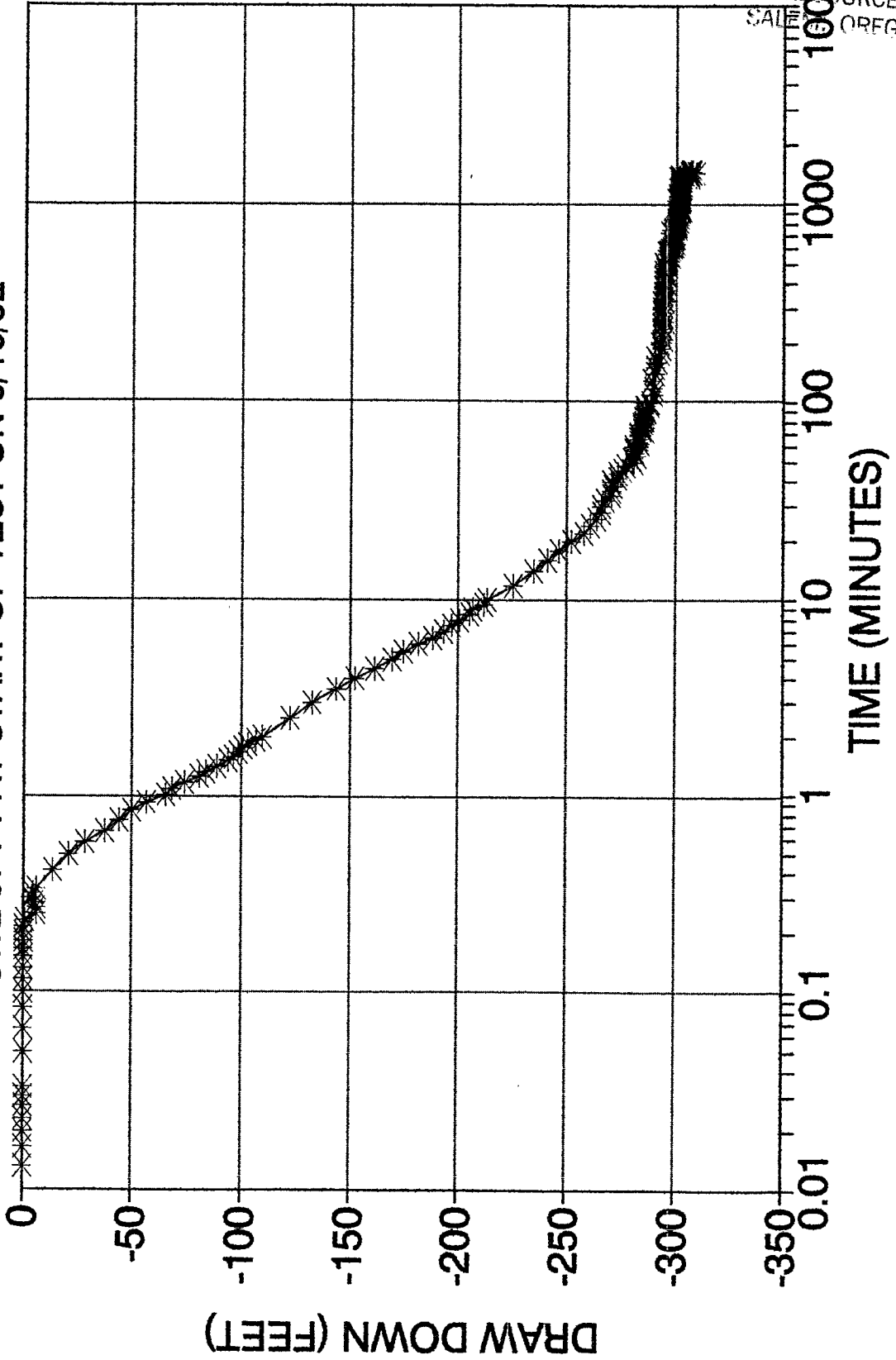
SEP 10 1992

WATER RESOURCES DEPT.  
SALES OREGON

# HERMISTON WELL NO. 32007

PUMP TEST 6/16-17/92 Q=1982 AVG GPM

SWL 87 FT AT START OF TEST ON 6/16/92



by Schneider Drilling Co.

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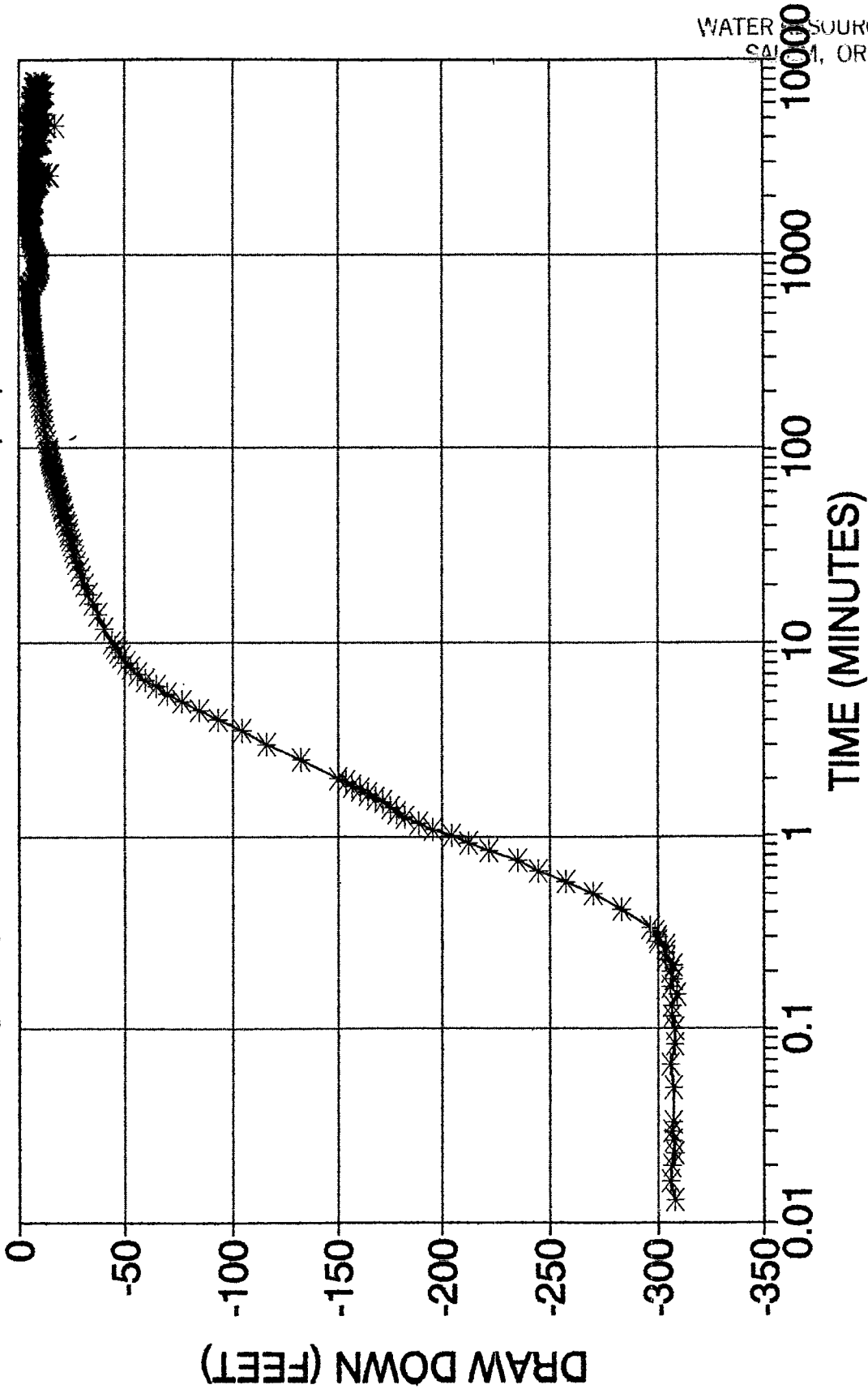
SEP 10 1992

WATER SOURCES DEPT.  
SALMON, OREGON

# HERMISTON WELL NO. 32007

RECOVERY TEST 6/17-22/92 Q=1982 AVG GPM

SWL 87 FT AT START OF TEST ON 6/16/92



by Schneider Drilling Co.

rec'd  
7/29/92  
S.F.

WATER  
RESOURCES  
DEPARTMENT

07/23/92

Steve Schneider  
21881 River Rd N.E.  
St. Paul, Oregon 97137

Watermaster

RE: Special Standards for Hermistons new well #2; SC#32007

RECEIVED

Dear Steve,

SEP 10 1992

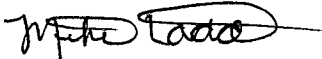
This is written conformation approving the special standards granted to you by phone on July 10, 1992 by Brian Mayer.

WATER RESOURCES DEPT.  
SALEM, OREGON

This standard is granted upon the condition that the well be completed as detailed in your letter dated July 07, 1992, a copy of which is attached.

Granting this special standard does not relieve the constructor and owner of the well from any future liability, in case the construction method provides an avenue for pollution the groundwater body.

Sincerly,



Michael Ladd  
NC Regional Manager

cc: Dude Woodward - City of Hermiston





WELL DRILLING  
IRRIGATION  
CONTROL SYSTEMS



**SCHNEIDER**  
**EQUIPMENT, INC.**  
**AND DRILLING CO.**

PUMPS  
ENGINEERED WATER SYSTEMS  
SALES AND SERVICE

FAX (503) 633-2668

21881 River Road N.E. St. Paul, Oregon 97137 (503) 633-2666

July 7, 1992

**RECEIVED**

SEP 10 1992

WATER RESOURCES DEPT.  
SALEM, OREGON

Water Resources Department  
North Central Region  
3920 Westgate  
Pendleton, OR 97801  
Attn: Brian Mayer

RE: City of Hermiston New Well No. 2; SC#32007

Dear Brian,

Pursuant to our phone conversation yesterday, this letter is our request for special standards on the above referenced well.

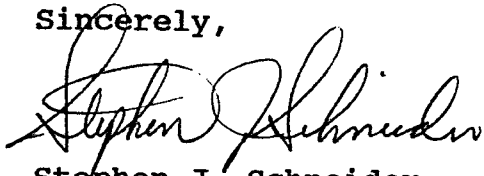
A formation log of the well is attached along with a sketch of the as-built to date. As you can see, a 24" diameter casing was driven as the upper borehole was drilled with cable tool to 45'. The casing was then cut at 34' on August 28, 1991, to aid in future removal during grouting. Subsequently, the rest of the well was constructed during which much vibration occurred along with substantial ground surface loading around the 24" casing. We have now been attempting to extract the 24" upper casing in order to simultaneously place a grout seal around the 20" casing. Our exhaustive efforts have failed even though we have utilized jacks exceeding a half million pounds of pull along with vibration from a down hole hammer. We have taxed/exceeded normal water well technology standards.

No additional water resource protection will be gained by extracting, or attempting to extract the 24" casing. The only alluvial water bearing within the depth of the 24" casing is that which is exposed to the surface and only extends to 15'. This shallow formation would not benefit from a standard 18' surface seal since it is directly connected to ground surface. Disturbing the 24" casing will only damage an otherwise very pronounced bond (seal) to the natural formation. We therefore

propose to leave the 24" casing in place and pump a cement grout seal full depth from the top of the pea gravel (150') to the surface, around the 20" casing. This will provide more than standard protection for the waters in the basalt. Will this meet with your approval?

Thank you for your prompt review of this abnormal situation.

Sincerely,



Stephen J. Schneider  
VP-Drill Operations

SJS/kss  
L1022.COH

cc: Stan Wallulis, Wallulis & Assoc.  
Dude Woodward, City of Hermiston

RECEIVED

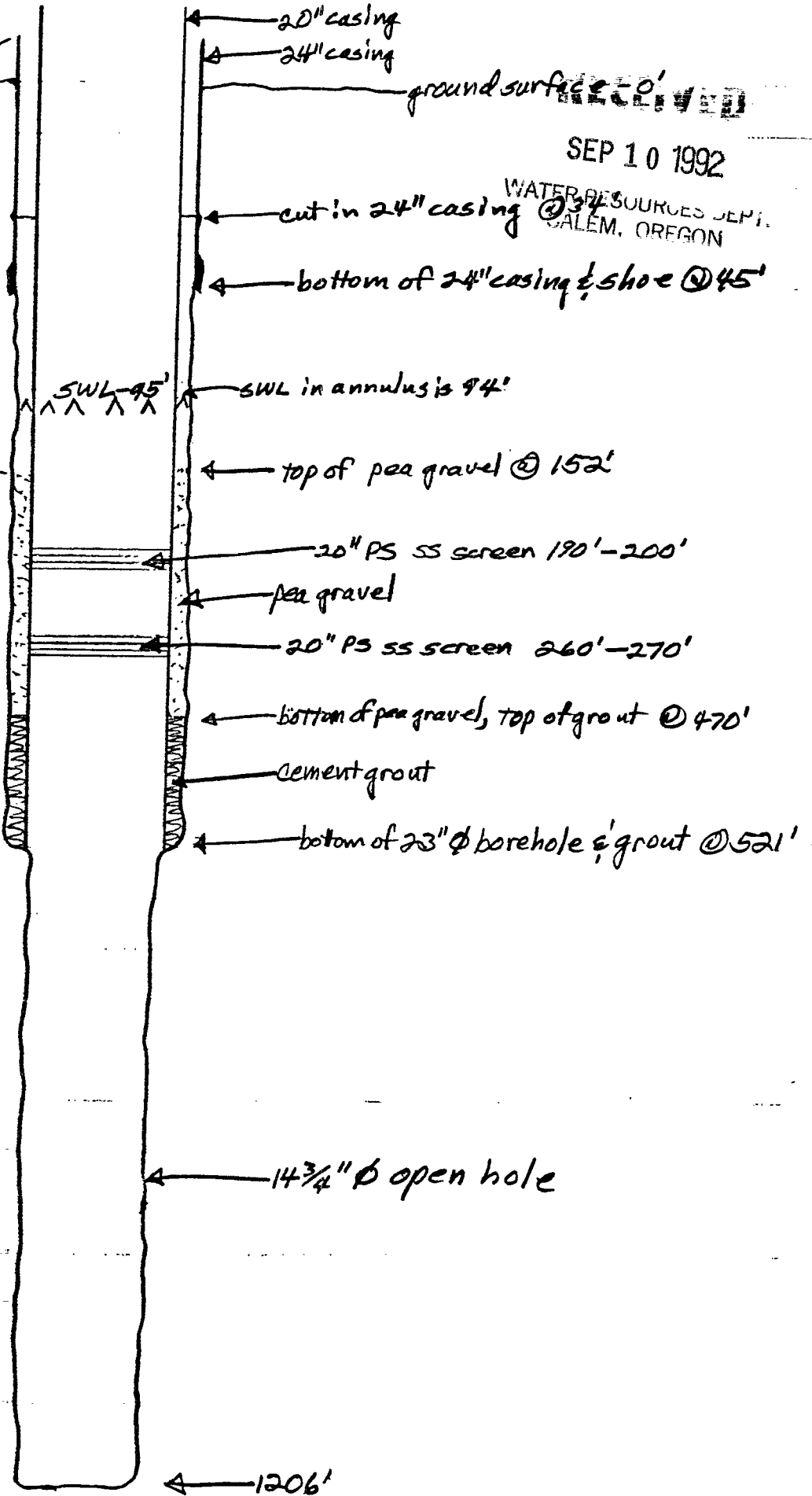
SEP 10 1992

WATER RESOURCES DEPT.  
SALEM, OREGON

City of Hermiston - New Well No. 2

7/7/92

proposed cement grout



City of Hermiston  
 New Well No. 2  
 by Schneider Drilling Co.  
 S.C. #32007

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SEP 10 1992

WATER RESOURCES DEPT.  
 SALEM, OREGON

From	To	Description
0	1	Top soil
1	9	WB Sand, coarse
9	15	
15	25	Boulders, gravel, & sand
25	30	Clay, greenish brown w/gravel imbedded
30	35	Clay, blue w/claystone, & some claystone brown
35	38	Claystone & clay, blue w/some rock pieces
38	40	CS, blue & clay, blue & basalt, blk, vesicular
40	43	Basalt, blk, vesicular, w/claystone, blue
43	46	Basalt, blk, vesicular, w/clay & claystone blue
46	65	Basalt, blk, vesicular, med
65	155	Basalt, blk, fractured, med
155	160	Basalt, blk w/some fractures, med-hard
160	165	Basalt, blk, fractured w/claystone, hard, gray
165	175	Basalt, blk, cindery w/clay, blk
175	185	WB 50gpm Sandstone, blk & clay, blk
185	190	
190	204	Sandstone and pea gravel cemented w/clay, blk
204	228	Basalt, broken, blk w/clay, green
228	233	Basalt, blk, well fractured
233	235	WB Basalt, gray, hard w/some fractures
235	246	
246	250	Basalt, blk, fractured
250	260	WB 100gpm Basalt, & clay, green
260	265	
265	270	Clay & claystone, green
270	279	Basalt, blk, & claystone, green
279	288	Basalt, blk, vesicular, broken w/some clay
288	294	Basalt, blk, cindery
294	303	Basalt, blk, broken & clay, green
303	318	Basalt, red & blk, vesicular, cindery
318	325	Basalt, gray, fractured, hard
325	373	Basalt, gray w/some fractures, hard
373	384	Basalt, gray, well fractured, med-hard
384	390	Basalt, gray, w/some fractures, hard
390	398	Basalt, gray, fractured, med-hard
398	404	Basalt, gray, w/some fractures, hard
404	415	Basalt, blk, fractured, med-hard
415	420	Basalt, blk, fractured, med-hard
420	435	Basalt, blk, fractured, med-hard
435	439	Basalt, blk, well fractured, vesicular
439	455	Basalt, blk, fractured, med
455	505	Basalt, blk, fractured, med
505	520	Basalt, blk w/some claystone, vesicular
520	525	Basalt, blk, fractured, med-hard
525	528	Basalt, blk, fractured, med-hard
528	553	Basalt, gray, very hard, fractured
		Basalt, gray, hard

553	555		Basalt, blk w/green claystone
555	559	}	Basalt, blk vesicular
559	590		Basalt, blk
590	592		Basalt, blk, vesicular
592	626		Basalt, blk, fractured
626	646		Basalt, blk, soft
646	666		Basalt, blk w/green claystone, soft
666	670		Basalt, blk w/green claystone
670	678		Basalt, gray w/green claystone
678	690		Basalt, gray w/green claystone, hard
690	745		Basalt, blk, med-hard
745	760	Basalt, gray, med-hard	
760	762	Basalt, blk, med-hard	
762	785	Basalt, blk, med-hard, fractured	
785	840	Basalt, gray, hard, fractured	
840	847	}	Basalt, blk, soft, vesicular & fractured
847	848		Basalt, blk, med, vesicular, fractured
848	852		Basalt, blk, med, fractured w/claystone
852	855		Basalt, brown & blk, med, vesicular
855	860		Basalt, blk, med, vesicular
860	862		Basalt, blk, broken, med
862	873		Basalt, blk, med-hard, fractured
873	887		Basalt, blk & red, med-soft, fractured, vesicular
887	901		Basalt, blk, med-hard, fractured w/claystone
901	907		Basalt, blk, soft, vesicular, broken
907	917		Basalt, blk, med-hard, fractured
917	924		Basalt, gray, hard
924	929		Basalt, blk, med-hard, fractured
929	936		Basalt, gray, hard
936	945		Basalt, blk, med, ves, broken, some med gray clay
945	954		Basalt, blk, med-hard, vesicular
954	966		Basalt, gray, hard, fractured
966	967		Basalt, blk, hard, fractured
967	979	Basalt, blk, med-hard, fractured	
979	987	Basalt, gray, hard	
987	992	Basalt, blk, med-hard, fractured	
992	1008	Basalt, gray, hard, fractured	
1008	1015	Basalt, gray, hard w/brown streaks, fractured	
1015	1052	Basalt, gray, fractured	
1052	1056	}	Basalt, vesicular, blk
1056	1060		Basalt, vesicular, multi-colored blk, brown, red
1060	1110		Basalt, gray, med-hard
1110	1145		Basalt, gray, med-hard, frac, very rough drilling
1145	1182	WB	Basalt, blk & gray, soft, vesicular
1182	1206		Basalt, blk & gray

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SEP 10 1992

WATER RESOURCES DEPT.  
SALEM, OREGON

'WB' means the so noted interval is believed to be a significant water bearing zone.